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AUTHOR Montgomery, Joel R.
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ABSTRACT

The effectiveness of a 1-day performance-focused human resource (HR) development workshop that was conducted in 21 sessions in cities throughout North America in March-September 1996 was monitored by an electronic survey sent to all 506 workshop participants 3 months after the workshop. Of those participants, 101 (20%) completed the survey, which sought information regarding the following: participant demographics; application/use of Andersen Consulting's Career Development Model; and participants' self-evaluations of their growth on Andersen Consulting's Performance Change Curve (PCC) with regard to the workshop's four targeted performance areas (increase proficiency in using the career development model and online HR decision-making tool; increase ability to work effectively to support other HR functional specialities; build awareness of patterns of thought/behavior/results involved in making/communicating HR decisions with coworkers/clients; and proactively share learning/improvement ideas with others). The survey confirmed that respondents were capable of measuring their targeted performance change against the benchmark offered by the PCC, both in terms of growth and absence thereof. The survey responses proved consistent with the responses to a survey administered 7 days after the workshop. A comparison of both sets of survey responses established that participants had continued to experience learning growth after the workshop. (Contains 14 tables/figures) (MN)

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Monitoring the Effectiveness of a Performance-Focused Human Resource Development Workshop at Andersen Consulting Three Months After the Workshop

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This study focused on measuring the effectiveness of an Integrative Learning workshop provided to 506 human resource professionals in Andersen Consulting's North American practice area. The Performance Change Curve was introduced as a framework for self-report data regarding targeted performance change three months after the workshop. Implications are drawn for future performance-focused education efforts at Andersen Consulting.
Keywords: Performance-Focused Learning, Performance Change, Integrative Learning, Reflective Learning, Learning Theory, Workplace Learning, Research Results

Andersen Consulting (AC) has pioneered the development and use of performance-focused human resource development programs with its global consulting workforce since early 1993 (Nowakowski, 1994; Montgomery, 1996a). In Fiscal Year 1996 (September, 1995 through August, 1996), Andersen Consulting Education (ACE), Andersen Consulting's internally focused professional development organization, invested more than $17,100,000 in development and delivery of performance-focused human resource development programs for AC's global workforce of 41,000 consultants (Montgomery, 1996b)[1] Measuring the performance return on this investment is recognized as a challenge and a growing business imperative. Research data documenting the effectiveness of these programs has not kept pace with the demand for and development of these programs. In early 1996 AC began collecting feedback survey data from participants in these programs using electronic media. This use of technology has made gathering research data more cost effective and practical.

This study focused on the evaluation of the effectiveness of one 8-hour, Andersen Consulting performance-focused workshop, the "Applied CDM Learning Day," offered to 506 human resource (HR) professionals in AC's North American practice area between March and September, 1996.

Background

In 1995, in order to stay ahead of the growing demand for deeply skilled consulting professionals to meet the needs of its global clients, Andersen Consulting (AC) introduced a competency-based framework for recruiting, staffing, and developing its global workforce of consulting professionals (Montgomery, 1996b). The *Career Development Model* (CDM) (Montgomery, 1996d) was first introduced in AC's North American practice area in a series of information-focused sessions provided to human resource professionals supporting this workforce. It soon became clear that these professionals needed additional support to learn to work with this model in their daily routines. To meet these needs, a performance-focused workshop was developed in December,

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[1] This only represents a portion of the financial investment made by Andersen Consulting in developing its global consultants. AC's gross income for the Fiscal Year was in excess of $4 billion and 6.5% was invested in the continuing development of its workforce (Montgomery, 1996b).

Paper presented at the 1997 Conference of the Academy of Human Resource Development, Mar. 6-9, 1997, at the Terrace Garden Hotel, Atlanta, Georgia, USA.

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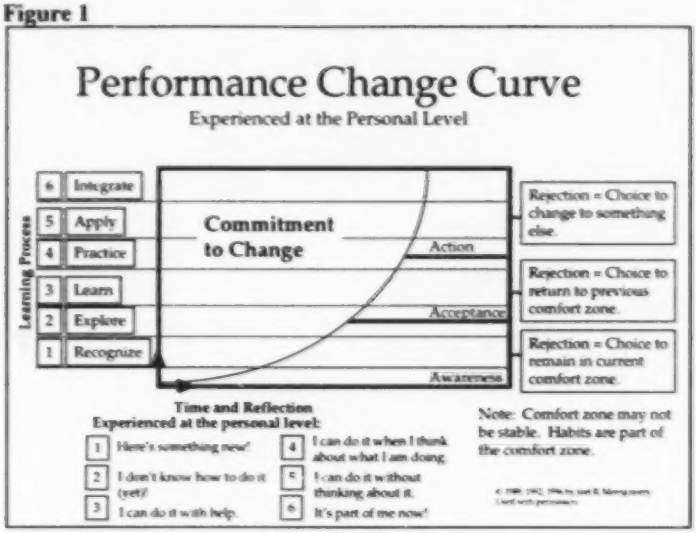
1995, using a systems approach to Integrative Learning design (Montgomery, 1996c). The conceptual design for this workshop was tested in February, 1996, and the workshop was piloted in March with very minor changes. . The design for this workshop was introduced at the 1996 Conference of the Academy of Human Resource Development (Montgomery,1996d).

After completion of the workshop, learners were expected to have moved up the Performance Change Curve (Montgomery, 1996a) (see Figure 1) in four areas:

1) Be more proficient in using the Career Development Model in making HR decisions regarding staffing, recruiting, and training.
2) Work more effectively in supporting other HR functional specialties.
3) Regularly think about what they are doing on the job and proactively implement ideas for continuous improvement in the way they work.
4) Proactively share learning and improvement ideas with others to help in the development and growth of AC's HR organization.

Figure 1


Performance Change Curve
Experienced at the Personal Level
Learning Process
6 Integrate
5 Apply
4 Practice
3 Learn
2 Explore
1 Recognize
Commitment to Change
Action
Acceptance
Awareness
Rejection = Choice to change to something else.
Rejection = Choice to return to previous comfort zone.
Rejection = Choice to remain in current comfort zone.
Time and Reflection
Experienced at the personal level:
1 Here's something new!
2 I don't know how to do it (yet)!
3 I can do it with help.
4 I can do it when I think about what I am doing.
5 I can do it without thinking about it.
6 It's part of me now!
Note: Comfort zone may not be stable. Habits are part of the comfort zone.

Research Questions:

1. Can participants use the Performance Change Curve (see Figure 1) as a common framework by which to measure targeted performance change?
2. Will the data regarding growth in targeted performance immediately after the workshop be consistent with the results of the "7-days after" survey?
3. How much growth on the Performance Change Curve did learners experience over the three months following the workshop?
4. Is there a correlation between frequency of personal use of the CDM and learning level on the Performance Change Curve in CDM-related targeted performance over the three months following the workshop?
5. What support activities have the learners experienced with regard to working with the CDM in the three months following the workshop?

Methodology:

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Monitoring the Effectiveness of a Performance-Focused Human Resource Development Workshop at Andersen Consulting Three Months After the Workshop

The "Applied CDM Learning Day" was conducted in 21 sessions at cities throughout North America during the period March through September, 1996. The number of participants in each session ranged from 11 to 46. Each of the 506 participants[2] was sent an electronic survey seven days after the workshop and three months after the workshop. 221 participants (44%) responded to the "7-days after" survey and 101 participants (20%) responded to the "3-months after" survey.[3] The results of the "7-days after" survey are presented in a separate paper (Montgomery, 1996e).

Only one version of the "3-months after" survey was used. This survey asked learners to place themselves on the Performance Change Curve for each of the four targeted performance areas for three time periods: Before the workshop; immediately following the workshop; and three months after the workshop. Learners were also asked how frequently they used the CDM and how frequently their internal customers used the CDM. The survey then collected frequency data regarding use or involvement in specific activities regarding support for their own learning, organizational support for learning, and knowledge transfer to internal customers.

Survey Composition The "3-months after" survey contained 14 questions divided into three sections. Questions 1 through 4 captured demographic information. Questions 5 through 9 captured information and comments regarding application and use of Andersen Consulting's Career Development Model. Questions 10 through 14 captured self-report data regarding growth on the *Performance Change Curve* for each of four targeted performance outcomes. For all questions other than typing a response, *keywords* were identified beside *radio-buttons*. To select a response, the participant would point over the button and "click" the computer's left "mouse" button. The choices were all made by keyword rather than by number. The Lotus Notes mail-in database was programmed to convert the selections to numerical responses. Data collected in the mail-in database was displayed in "views" matching the questions on the survey. Data displayed in these "views" was then exported into a Microsoft Excel spreadsheet where data analysis was conducted.

Results and Analysis

Targeted Performance

1. I have become more proficient in using the Career Development Model (CDM) in making Human Resource (HR) decisions regarding staffing, recruiting, and training.
2. I have increased my ability to work effectively in supporting other HR functional specialties.
3. I regularly think about what I am doing on the job and proactively implement ideas for continuous improvement in the way I work.
4. I am proactively sharing learning and improvement ideas with others to help in the development and growth of our HR organization.

Survey Questions Focused on Targeted Performance Change

The summary question was: How would you assess your growth in the following areas?

Possible Responses:

- Apply/Do it without thinking about it (5)
- Practice/Do it when I think about it (4)
- Learn/Do it with help (3)
- Explore/Don't know how to do it—yet! (2)
- Recognize/Here's something new! (1)
- Unaware/Blank/Zero Level (0) created by three respondents.

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[2] While total of 506 human resource professionals participated in the workshop. 92 participants participated in workshops conducted after the cut-off date for the "3-months after" surveys used in this study.

[3] For the purposes of the tables in the Results and Analysis section of this paper, the numbers used represent both the actual number of respondents and the percentage of respondents.

Monitoring the Effectiveness of a Performance-Focused Human Resource Development Workshop at Andersen Consulting Three Months After the Workshop

Table 1: Targeted Performance Before the Workshop

Level on Change Curve	Performance 1	Performance 2	Performance 3	Performance 4
Apply = 5	8	10	23	21
Practice = 4	28	24	39	35
Learn = 3	21	24	15	23
Explore = 2	28	22	15	10
Recognize = 1	15	16	8	12
Unaware = 0	1	3	0	0
Number of Responses	101	99	100	101
Average Score	2.83	2.81	3.54	3.43

Table 2: Targeted Performance Immediately After Workshop

Level on Change Curve	Performance 1	Performance 2	Performance 3	Performance 4
Apply = 5	13	17	33	32
Practice = 4	40	36	42	34
Learn = 3	30	29	15	22
Explore = 2	16	15	9	8
Recognize = 1	2	2	1	4
Unaware = 0	0	0	0	0
Number of Responses	101	99	100	100
Average Score	3.46	3.52	3.97	3.82

Table 3: Targeted Performance 3 Months After Workshop

Level on Change Curve	Performance 1	Performance 2	Performance 3	Performance 4
Apply = 5	33	29	43	39
Practice = 4	49	44	45	41
Learn = 3	10	20	7	14
Explore = 2	6	4	5	5
Recognize = 1	2	2	0	1
Unaware = 0	0	0	0	0
Number of Responses	101	99	100	100
Average Score	4.05	3.95	4.26	4.12

Table 4: Reported Growth in Targeted Performance Immediately After Workshop

Growth on Change Curve	Performance 1	Performance 2	Performance 3	Performance 4
5 levels up		1		
3 levels up		1		1
2 levels up	10	7	6	4
1 level up	48	50	31	29
0 growth	38	39	63	65
1 level down	5			
2 levels down		1		
3 levels down				1
Number of Responses	101	99	100	100
Average Growth	0.62	0.71	0.43	0.37

Table 5: Reported Growth in Targeted Performance in the 3 months following Workshop

Growth on Change Curve	Performance 1	Performance 2	Performance 3	Performance 4
3 levels up				1
2 levels up	4	4	1	2
1 level up	52	37	28	24
0 growth	44	56	70	72
1 level down	2	2	1	1
Number of Responses	100	99	100	100
Average Growth	0.58	0.43	0.29	0.3

Survey Questions Focused on Use of the Career Development Model (CDM)

A. How often do you personally work with the CDM in your daily Human Resource (HR) activities? (Example: How often do you bring up CDM terms or concepts in your phone calls with customers?)

B. How often are your Operating Group customers demonstrating understanding of the CDM in HR-related conversations? (Example: Partners asking you about staffing by skill track, skill domain, and proficiency levels.)

Possible Responses: Almost always (5); Daily (4); Weekly (3); Monthly (2); Almost never (1); No Response.

Table 6: Use of the Career Development Model

Question	Almost Always	Daily	Weekly	Monthly	Almost Never	No Response
Personal Use	14	40	35	7	4	1
Customer Use	0	15	36	19	25	6

Survey Questions focused on Support for Learning to work with the CDM:

What are you personally doing to increase your own ability to work with the CDM more easily in your daily HR activities? (Example: Working with the C-Map Writer (an on-line tool) once a week to prepare sample skill maps for my customers.)

Figure 2

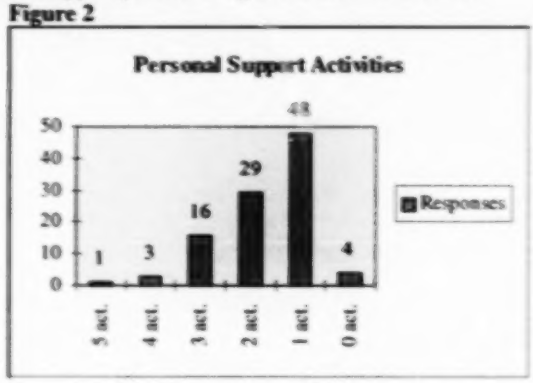

Table 7: Personal Support Activities

	Creating my own job aids	Developing job aids with others	Using job aids	Participating in CDM-related meetings and lunches	Bringing up CDM-related ideas in conversations	Learning to do more with the C-Map Writer tool	Other
Responses	6	8	18	20	67	41	11

What is your operating group doing to help you learn to work with the CDM in daily HR activities? (Example: Lunch & Learn "Brown-Bags" to share CDM-related best practices and ideas.)

Figure 3

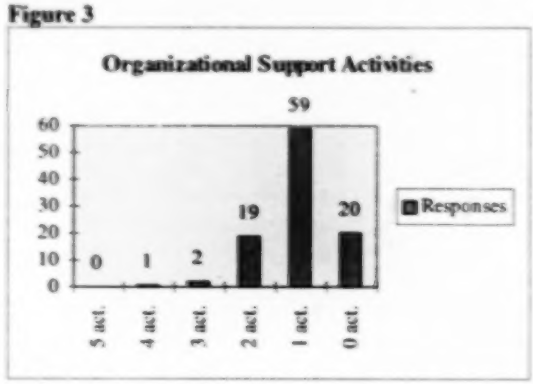

Table 8: Organizational Support Activities

	Job Aids are Developed and Shared	Regular Cross-Functional Team Meetings	Weekly Meetings	Informal Conversations	Lunch and Learn "Brown Bags"	Other
Responses	7	18	7	54	6	15

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What are you and your operating group doing to help customers learn how to work with the CDM in their dealings with you? (Example: Taking the time to walk a customer through the C-Map and proficiency plan when speaking about staffing issues.)

Figure 4

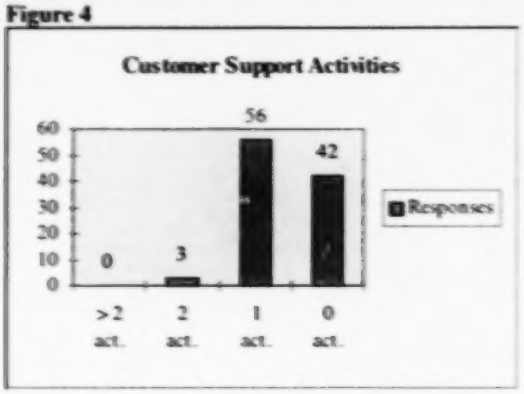


Table 9: Customer Support Activities

	Talking about the CDM in routine conversations	Making special CDM-focused calls	Asking questions using CDM terms	Making recommendations using CDM terms	Other Activities
Responses	59	3	51	38	8

Conclusions:

Research Question 1: Can participants use the Performance Change Curve (see Figure 1) as a common framework by which to measure targeted performance change? Results of the "3-months after" survey indicated that respondents were able to measure their targeted performance change against the benchmark offered by the Performance Change Curve, both in terms of growth and absence of growth.

Research Question 2: Will the data regarding growth in targeted performance immediately after the workshop be consistent with the results of the "7-days after" survey? 77% of the respondents to the "7-days after" survey reported at least "moderate" growth in all four of the targeted performance areas. The wording for the four areas was slightly revised for the "3-months after" survey. 81% of respondents reported performance on at least the *Learn* level of the Performance Change Curve for all four of the targeted performance areas. 26 % moved to the *Learn* level or above in the CDM-related targeted performance; 24% moved to the *Learn* level or above in the area of working more effectively with cross-functional HR specialties. 13% moved to the *Learn* level or above in the area of reflecting on their work and implementing continuous improvement; 9% moved to the *Learn* level or above in the area of sharing their continuous improvement ideas with the organization and with their colleagues. These percentages are consistent with "moderate" growth. The data also suggests that the *Learn* level on the Performance Change Curve is a reasonable target for performance change in workshops of short duration.

Research Question 3: How much growth on the Performance Change Curve did learners experience in the three months following the workshop? 91% of respondents reported performance at the *Learn* level or above on the Performance Change Curve for all four of the targeted performance areas. 9% of respondents reported continued growth to at least the *Learn* level in the CDM-related targeted performance; 11% of respondents reported continued growth to at least the *Learn* level in the area of working more effectively with cross-functional HR specialties. 5% of respondents reported continued growth to at least the *Learn* level in the area of reflecting on their work and implementing continuous improvement; 6% of respondents reported continuing growth to at least the *Learn* level in the area of sharing their continuous improvement of ideas with the organization and with their colleagues. These results indicate that growth does extend beyond the completion date of the workshop. 72% of respondents reported performing on the *Practice* or *Apply* levels on the Performance Change Curve for all four areas of targeted

performance change at the end of the three-month period. (This may reflect a narrowing of focus with regard to implementing the targeted performance change.)

Research Question 4: Is there a correlation between frequency of personal use of the CDM and learning level on the Performance Change Curve in CDM-related targeted performance over the three months following the workshop? .) Using the Correlation functions available in Microsoft Excel, the correlation between these two variables was .0.46 (not statistically significant at the P = < .05 level).

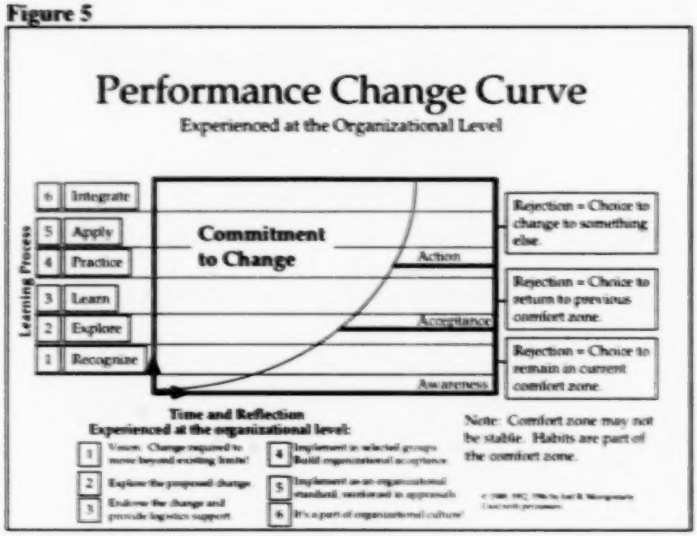
Research Question 5: What support activities have the learners experienced with regard to working with the CDM in the three months following the workshop? Possibilities included personal activities, organizational activities, and customer-focused activities. 96% of respondents reported being involved in one or more activities at the personal level (with 47.5% involved in only one activity). 80% of respondents reported being involved in one or more activities at the organizational level (with 58.4% involved in only one activity). 58% of respondents reported being involved in one or more customer-focused activities regarding the CDM (with 55.4% involved in only one activity). 69% of respondents indicated that their customers worked with the CDM in interactions with them at least monthly. Data regarding customer-support indicates that these activities have a lower priority than personal and organizational activities in understanding and working with the CDM.

The survey data indicates that learners who were actively involved in supporting their personal learning and in transferring knowledge to their internal customers also experienced growth along the Performance Change Curve for the targeted performance outcomes of the workshop. A follow-on survey is planned to ask respondents for the factors they experienced which inhibited growth along the Performance Change Curve.

Implications

This "3-months after" survey confirmed the results of the "7-days after" survey reported elsewhere (Montgomery, 1996e). The Performance Change Curve provided a reference point participants were able to use to benchmark their performance change. The electronic survey offered a collection approach learners were able to work with. Both the Performance Change Curve and this method of data collection and reporting, including both "7-days after" and "3-months after" surveys, are already being used to evaluate the effectiveness of other human resource development workshops at Andersen Consulting.

Figure 5


Performance Change Curve
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Rejection = Choice to remain in current comfort zone.
Time and Reflection
Experienced at the organizational level:
Note: Comfort zone may not be stable. Habits are part of the comfort zone.

Performance Change Curve at the Organizational Level

The Performance Change Curve has implications at the organizational level (Montgomery, 1996a) (see Figure 5.) For the CDM-related performance change to become a part of firm culture, the organization needs to move through the learning levels on the curve. The need for this workshop indicated that AC is on the *Learn* level

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on the Performance Change Curve. More logistics support for implementing the CDM is required. The data regarding use by customers and the response to Research Question 5 indicate that support for this change is not uniform across the offices the participants were drawn from.

Organizations can work with the Performance Change Curve to evaluate their level of support and commitment to targeted performance change. Further research using the curve is needed to determine the usefulness of its details in tracking performance change at an organizational level.

The Performance Change Curve may also serve as a common benchmark for sponsors of human resource development programs to use to target performance change coming from human resource development programs. Participants in these programs and supervisors can use the same benchmark to identify the effectiveness of the programs and of the logistical measures in place to support performance change in the workplace.

How this Research Contributes to New Knowledge in HRD:

This research documents the effectiveness of a performance-focused human resources development workshop developed by and for Andersen Consulting's human resource professionals. This builds on the work introduced at the 1996 Conference of AHRD and documents the effectiveness of electronic surveys as a medium for data collection. The Performance Change Curve was used as a benchmark for self-report feedback by respondents to the survey and was adapted for use at the organizational level as well. These two versions of the Performance Change Curve represent innovations in thought in HRD literature. This study also builds on an earlier study (Montgomery, 1996e) to document the effectiveness of an Integrative Learning systems approach to designing human resource development programs.

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